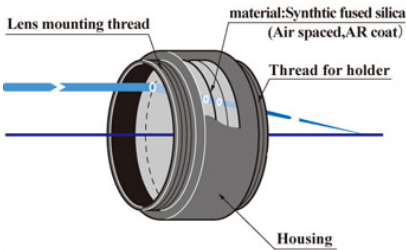


Fiber Laser Focusing Lenses

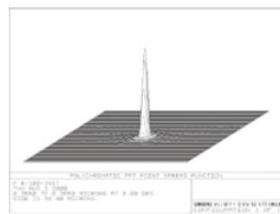


- Lens Optimized to reduce the effect of thermal expansion by using all fused silica elements
- High performance Multi-Element lenses, suitable for focusing and collimating solid state lasers such as Yb fiber laser, YAG laser and YV04 laser
- Optimized AR coating from 1040nm - 1150nm: maintain Transmittance at 633nm for HeNe pointing lasers
- Corrected for spherical aberration and coma @1064nm. Lens is diffraction limited for $f\# > 2$ ($NA < 0.25$)

Functional Figure



Point Spread Function



Specifications:

Material: Synthetic fused silica

Coating: 1060nm-1080nm
 $R \leq 0.25\%$ (per coated surface)
 1040nm-1150nm
 $R \leq 0.5\%$ (per coated surface)
 600nm-700nm
 $R \leq 10\%$ (per coated surface)

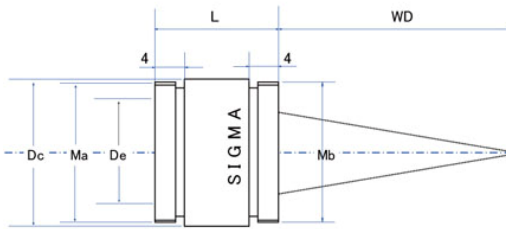
Design wavelength: 1064nm

Lens assembly: Air gap

Conjugate ratio: Infinity

Housing: Black anodized aluminum

Outline drawing



● Abbreviation

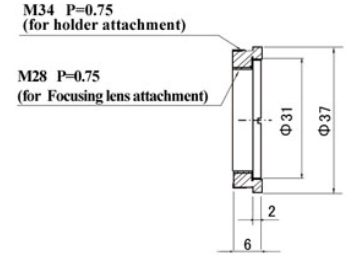
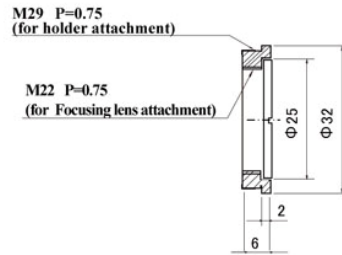
- f Focal length
- Dc Diameter of case
- De Clear aperture
- L Length of case
- Ma Thread for attachment
- Mb Thread for attachment of protective window retainer
- WD Working distance

● Tolerance

- Case size ± 0.1
- Size ± 0.1
- Thickness ± 0.2
- Focal length $\pm 2\%$

Drawing of adapter for 027-0510

Drawing of adapter for 027-0520



Type	Max.lens Diameter [mm]	f [mm]	Dc [mm]	De [mm]	L [mm]	Ma [mm]	Mb [mm]	F Number	Field angle (full angle°)	WD [mm]	Chromatic Aberration [mm]	Price	Part Number
Triplet	15.0	20.0	24.0	12.0	16.0	M22 P=0.75	M22 P=0.75	1.7	3.6	13.7	-0.31	\$ 795.00	027-0510
Triplet	20.0	30.3	30.0	17.0	21.0	M28 P=0.75	M28 P=0.75	1.8	2.4	22.0	-0.47	\$ 795.00	027-0520
Triplet	30.0	40.0	36.0	27.0	31.0	M34 P=0.75	M28 P=0.75	1.5	2.0	24.9	-0.62	\$ 795.00	027-0530
Triplet	30.0	50.0	36.0	27.0	28.0	M34 P=0.75	M28 P=0.75	1.9	2.0	35.4	-0.77	\$ 795.00	027-0540
Triplet	30.0	60.1	36.0	27.0	23.0	M34 P=0.75	M34 P=0.75	2.2	2.0	51.4	-0.94	\$ 795.00	027-0550
Triplet	30.0	80.0	36.0	27.0	23.0	M34 P=0.75	M34 P=0.75	3.0	2.0	71.7	-1.26	\$ 795.00	027-0560
Triplet	30.0	100.0	36.0	27.0	23.0	M34 P=0.75	M34 P=0.75	3.7	2.0	92.7	-1.55	\$ 795.00	027-0570
Doublet	30.0	150.0	36.0	27.0	18.0	M34 P=0.75	M34 P=0.75	5.6	2.0	131.0	-2.60	\$ 725.00	027-0580

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